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ANNUAL WILDLIFE REPORT

FY 1979

INTERMOUNTAIN REGION

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NARRATIVE
Annual Wildlife Report
1979
Intermountain Region

GENERAL

Implementation of "Wildlife Action" has very definitely increased the overall wildlife program throughout the Region. Region 4 continued to make substantial progress with their wildlife and fish habitat management program in 1979. Regional emphasis was placed on direct habitat improvement outlined in the State comprehensive plans, and increased utilization of K-V funds to accomplish habitat improvement and developement of Forest threatened and endangered plant and animal management plans. Accomplishments included:

	Habitat Improvement (Acre Equivalents)	Habitat Maintenance (Acre Equivalents)
Program Management - Wildlife	160,917	2,690
Program Management - Fish	830	235
Program Management - T&E	5	0
K-V	22,085	255
Manpower - Wildlife and Fish	11,486	760
Fire Management Areas	22,825 1/	-
TOTAL	218,144	3,650

1/ Actual Acres

A total of 136 plans, surveys, and studies were also completed during F.Y. 1979.

This is the second consecutive year that the Region has exceeded the financed habitat improvement targets. The results have greatly increased the program contributions for increased managerial effectiveness! Many Forests have an effective MBO Wildlife effort underway.

Efforts are being made to strengthen cooperative relationships with other agencies and organizations. An increasing number of cooperative studies with various agencies are resulting from this effort.

The Region experienced a severe winter. Some deer loss occurred, particularly in the northeastern section of Utah and southeastern Idaho plus parts of southwestern Wyoming due to the duration of abnormally low temperatures. In most cases, however, deer as well as other big game species populations remained stable in spite of the severe conditions.

The Region has been working closely with the Fire Management Staff in the development of fire management area plans and the use of prescribed fire. Several fires occured within approved prescriptions that increased habitat diversity and thereby were a benefit to wildlife. This program has great potential in the future.

One of the most intensive Regional efforts consisted of updating and revising all comprehensive wildlife plans with the States. Some are joint efforts with Regions 1, 2, and 5. With the completion of Wyoming, scheduled for early 1980, all State plans will be signed and active implementation will be underway. The Regions use the plans to develop various levels of programs for budgeting proposals.

THREATENED AND ENDANGERED SPECIES

The document "Guidelines for Management Involving Grizzly Bear in the Greater Yellowstone Area" has received a favorable biological opinion from the Fish and Wildlife Service. The Region, particularly the Targhee National Forest, has assisted the Fish and Wildlife Service with the study concerning the impacts to grizzly bears due to strychnine baiting of pocket gophers. Study results are important as they affect the pending biological opinion regulating strychnine use in grizzly bear areas.

Grizzly bear activity near the border of Yellowstone National Park and the Targhee National Forest necessitated the temporary closure of Cave Falls Campground. Later in the summer, grizzly bear No. 14 of the Interagency Grizzly Bear Study Team was shot and killed in the Hominy Peak area of the Targhee National Forest. A favorable biological opinion issuing timber sales on the Boise N.F. culminated from the good cooperative interagency efforts of many people including representatives of the Wolf Recovery Team. Significant progress was made in the cooperative efforts of the Forest Service, Fish and Wildlife Service, Bureau of Land Management, National Park Service, and the Utah Division of Wildlife Resources to reestablish the Utah prairie dog on public lands. A recovery plan for the prairie dog has been drafted by an interagency work group organized by the Utah Division of Wildlife Resources. Transplants of the Utah prairie dog were made during F.Y. 1979 on the Dixie and Fishlake National Forests. Future transplants to Forest lands are planned.

A work group, including representatives from Region 4, has been formed to address the recovery of the Lahontan cutthroat trout in Nevada. The group is to develop evaluation criteria for the status of the Lahontan cutthroat trout and to eventually develop a recovery plan for this species.

REGIONAL PROGRAMS

The animal habitat relationships program was continued in F.Y. 1979. The purpose of the program is to develop habitat type/species relationships. Primary emphasis during the year was directed at those relationships associated with coniferous Forests. Efforts were started in identifying these relationships within the riparian and rangeland ecosystems. In general, study sites are selected to correspond to meet pertinent Forest Service needs such as timber sale areas on the Caribou and Wasatch National Forests, geothermal areas on the Targhee National Forest, and the proposed elk feeding ground on the Bridger-Teton National Forest.

An automatic data processing system which will retrieve wildlife species/habitat relationships at the District, Forest, and Regional level is currently being developed. The program will be utilized to retrieve literature review files and to compare inventories developed by Forest biologists with potential vegetation, Regional habitat types, and ecosystems. Information will be available by various combinations of species community type, Forest, state, or county arrangements. In addition, a brief summary of articles reviewed will be available in tabular form of each species in the community matrix.

A program for collecting seed from approximately 20 species of forbs beneficial to various species of wildlife was initiated in F.Y. 1979. Seed was distributed to individual Forests to be utilized in various projects to benefit wildlife. Approximately 750 pounds were distributed to approximately one-half of the Forests for wildlife habitat improvement. The program is intended to be continued and expanded.

Elk habitat coordination guidelines are currently being developed for three similar geographic areas within the Intermountain Region. It is anticipated that the guidelines for the areas: Boise and Payette National Forests; Salmon, Challis, and Sawtooth National Forests; and Bridger-Teton National Forest will be completed this winter.

Several cooperative studies with universities and State and Federal fish and game agencies are ongoing. Two grouse habitat studies, one on the Caribou National Forest with the University of Idaho and the other on the Wasatch National Forest with Utah State University, were begun during F.Y. 1979. A raptor study involving the Wyoming Game and Fish Department and the Forest Service is continuing. Utah State University is under contract to develop a data information system for vertebrate species and their habitats within the Intermountain Region. Completion is scheduled for December 1979.

The formative years for the Idaho Anadromous Fish Program, which involves Regions 1 and 4 of the Forest Service, and the State of Idaho, were F.Y. 1978 and F.Y. 1979. The coordinator position for the program was filled by Albert W. Collotzi in June.

The contract for macroinvertebrate analysis was completed in September by Dr. Robert Winget of Brigham Young University, as a part of the total GAWS (General Aquatic Wildlife System) Program. This macroinvertebrate analysis emphasizes the use of a Biotic Condition Index. The Condition Index integrates biological, physical, and chemical factors of aquatic ecosystems.

Negotiations are underway with Dr. Merlyn Brusven, University of Idaho, to document the imbeddedness condition of stream substrates. This is an important measure of the quantity of sediments that enter the stream substrate and thereby affect production of aquatic organisms.

The Regional Aquatic Ecologist cooperated with the Soil and Water Management Staff in the redraft of the guidelines for inventory of valley bottomlands. Valley bottomlands are unique land units associated with stream environments that include biotic and abiotic resources within aquatic, riparian, and terrestrial settings.

The National Wildlife Directors Meeting was hosted by Region 4 in May. Dr. William Webb, member of the Committee of Scientists, attended and gave input to that meeting in Salt Lake City, Utah. A resource coordination workshop for silviculturists and biologists, plus State Fish and Game representatives, was also held in Salt Lake City. The workshop, which was co-sponsored by Timber Management and Wildlife Management Staffs, was very well received. A joint workshop on the use of prescribed fire was held with fuels managers, wildlife biologists, State Foresters, and representatives from the Bureau of Land Management, State Fish and Game Departments, and universities. The session was held in Salt Lake City, Utah.

ANIMAL DAMAGE

A Washington Office Acitvity Review was conducted on pocket gopher management within the Western Regions. The team visited the Boise, Payette, and Targhee National Forests the week of July 25. The main objective of the review was to evaluate current practices of pocket gopher management and to explore alternatives to improve the effectiveness of gopher control techniques. Alternatives currently being considered are reforestation of harvested areas in a more timely fashion and the use of Vexar seedling protectors. An action plan resulting from this review will be written in early 1980.

Approximately 370,000 tree seedlings scheduled for planting on the Targhee National Forest were withheld from planting because of a biological

opinion rendered by the Fish and Wildlife Service. The opinion suggested that strychnine treated oats used to manage pocket gophers might subject individual grizzly bears to secondary poisoning. The Fish and Wildlife Service study, led by Vic Barnes, is expected to yield further information on the effects to grizzly bears.

STUDIES AND PUBLICATIONS

Nevada Comprehensive Plan
Utah Comprehensive Plan
Land Use and Wildlife with Emphasis on Raptors
Riparian Wildlife Resume'
A Report on the Value of Wildlife with a 1979 Addendum
Wildlife Reference
Wildlife Species List
Selected Literature for Raptor Management
Macro What? (brochure)
Macroinvertebrate Analysis, Phases I and II
Threatened and Endangered Animal and Plant Species of the Intermountain Region
So You Want to Be a Wildlife Biologist!
Macroinvertebrate Analysis (ongoing substrate inbeddedness study to be initiated)
Monitoring of Wild Fire Effects on Aquatic Ecosystems (in conjunction with Soil and Water Management)
Utah Prairie Dog Transplant Site Analysis
Historic and Potential Peregrine Eyrie Survey on the Bridger-Teton
Red Creek Elk-Logging Study: Post Logging Phase (Bridger-Teton National Forest)
Survey on Status of Grizzly Bears on the Bridger-Teton National Forest
Winter Survey of Gray Wolves in the Gros Ventre Area
Survey of Osprey and Response to Human Activities
A Floristic and Ecological Study of Mount Nebo and Vicinity
Threatened and Endangered Plant Study of the Sweetwater Mountain Area, Toiyabe National Forest
Plant Survey of the Proposed Threatened and Endangered Species of the Challis National Forest

NATIONAL FORESTS STUDIES AND PUBLICATIONS

ASHLEY:

Endangered, Threatened, and Sensitive Species Plan
Cooperative Interagency Fish and Wildlife Mitigation
Trout Creek Habitat Management Area

BOISE:

Marker's Guide to Wildlife Concerns
Effect of Deadwood Timber Sale on the Gray Wolf
Elk-Timber Relationships

BRIDGER-TETON:

Management Program for Threatened, Endangered, and Sensitive Flora and Fauna and their Habitats on the Bridger-Teton National Forest, Wyoming (draft)
Bridger Wilderness Fish Brochure

CHALLIS:

Deer and Elk Responses to Rest-Rotation Grazing
Elk Guidelines

CARIBOU:

Wildlife Habitat Management Plan - Soda Springs District
A Program for Threatened, Endangered, and Sensitive Plant and Animal Species and Their Habitat
An Updated Plan for Wildlife Management on the Curlew National Grassland
Phosphate-Wildlife Study, Phase I--Inventory

DIXIE:

Comprehensive Plan for Fish and Wildlife on the Dixie National Forest
Cooperative Cougar Study
Transplant Sites for the Utah Prairie Dog

FISHLAKE:

Forest Habitat Plan for Threatened, Endangered, and Sensitive Plants
Forest Habitat Plan for Threatened, Endangered, and Sensitive Animals

HUMBOLDT:

Cooperative Lahontan Cutthroat Trout Stream Surveys-(with Nevada Department of Wildlife)

MANTI-LASAL:

Cooperative Beaver Habitat Survey (Utah Division of Wildlife Resources)
Cooperative Deer Productivity Study (Utah State University and Utah Division of Wildlife Resources)

PAYETTE:

Cooperative River Otter and Mink Studies (University of Idaho - continuing)
Instream Flow Needs of Fish in Two Drainages

SALMON:

Bear River Fencing Project Evaluation

SAWTOOTH:

Elk Guidelines
Cooperative Bighorn Sheep Winter Range Evaluation (Idaho Department of Fish and Game, Bureau of Land Management, University of Idaho Cooperative Unit)
Effects of Rest-Rotation Systems on Big Game
Cougar Population Dynamics (with Idaho Department of Fish and Game)
Fisheries/Grazing Interaction Study on Pole Creek and Frenchman Creek
Plant Community Identification Research Project in Riparian Zones (with University of Idaho)

TARGHEE:

Guidelines for Management Involving Grizzly Bears in the Greater Yellowstone Area
Impacts of Strychnine Baiting of Pocket Gophers on the Grizzly Bear
Sheep-Bear Predation, Bighorn Sheep Study

TOIYABE:

Toiyabe Threatened and Endangered Species Plan

UINTA:

Oakbrush Management Plan (with Brigham Young University)
Raptor Management Plan for Diamond Fork (update with Brigham Young University)
Wildlife Management Plan for the Vernon Division (with Brigham Young University)
Threatened and Endangered Plant Survey (with Brigham Young University)
Cooperative Bobcat Population Study in The Hobble Creek and Diamond Fork Drainages (with Brigham Young University and Utah Division of Wildlife Resources)
Cooperative Sage Grouse Study, Vernon Division (Utah Division of Wildlife Resources)
Effects of Two Sagebrush Removal Methods on Bird Populations on the Vernon Division (with Brigham Young University)

WASATCH:

Exclosure Study to Document Effects Due to a Change from a Sheep to a Cattle Allotment
Study to Determine Possible Changes to the Stream Environment Due to a New Grazing Plan Effective in 1980

WILDLIFE PERSONNEL

The Intermountain Region, in compliance with the Wildlife Management Institute's recommendation, is striving to attain the goal of a biologist on every District. In F.Y. 1979, the Uinta National Forest met that goal. At present, the Region employs 19 aquatic biologists, 44 terrestrial biologists, and 1 botanist. It is of interest to note that an additional 60 wildlife biologists are employed within the Region in different disciplines. 1980 will mark the first time that all Forests in the Region will have a biologist in the Forest Supervisor's office.

The Cooperative Education Program was used in F.Y. 1979 to employ 1 graduate and 3 undergraduate students. The positions are located on 2 Forests and in the Regional Office.

The Intern Program started by a graduate student in F.Y. 1978 is ongoing. The completion of a wildlife habitat management plan for a Ranger District is in partial fulfillment of his degree. Completion of the program is anticipated in F.Y. 1980. This master's degree program is aimed at management efforts rather than the traditional research one. The wildlife biologist trainee program initiated in F.Y. 1977 has been a tremendous asset to the Regional program. Several of the trainees have been converted to District biologist positions. An additional 18 trainee and 6 graduate education positions are scheduled for F.Y. 1980.

Bruce Giunta with the Utah Division of Wildlife Resources has been under assignment to the Uinta National Forest under the IPA Program. His input into lead Forest planning has contributed greatly to the Forest effort.

SUMMARY OF WILDLIFE AND FISH HABITAT IMPROVEMENTS ON
NATIONAL FOREST LANDS IN THE INTERMOUNTAIN REGION DURING F. Y. 1979

	UTAH	IDAHO	NEVADA	CALIFORNIA	WYOMING	TOTAL
1. Wildlife habitat improvement through pothole development, marsh improvement, seeding, planting, prescribed burning, brush piling, herbicide treatments, pruning, openings, and pinyon-juniper control.	6,968 acres	12,775 acres	10,645 acres	250 acres	1,021 acres	31,659 acres
2. Wildlife habitat improvement through water developments, next boxes, and road closures.	404 structures	103 structures	101 structures		2 structures	610 structures
3. Fish habitat improvement through stream structure screens and dam construction.	80 structures	365 structures				445 structures
4. Fish habitat improvement through bank stablization, meadow protection, and barrier removal.	56 structures	141 structures				207 structures
5. Maintenance of structural improvements.	19 structures	46 structures	15 structures			80 structures
6. Fish and wildlife habitat maintenance and/or improvement through coordination with other resources.	1,455,771 acres	1,114,187 acres	754,346 acres	1,800 acres	719,156 acres	4,045,260 acres
7. Wildlife and fish habitat surveys, studies, and plans.	23 surveys 20 plans	4 surveys 8 studies 34 plans	17 surveys 4 plans	2 surveys 1 plan	6 surveys 8 plans	52 surveys 8 studies 67 plans

WILDLIFE AND FISH PROJECTS IN F.Y. 1979
BY
FOREST AND STATE

TERMS:

PM	These are projects which were funded from wildlife funds.
K-V	(Knudsen-Vandenburg). This Act provides a certain portion of funds collected on a timber sale be kept by the District to be used to regenerate the Forest within the sale area. Recent amendments have allowed some of these funds to be spent for the wildlife resource.
MANPOWER	This is a federal program to aid youths. By providing a labor pool, this program has helped accomplish many habitat improvements.
*	This indicates that the specific item was identified as a Sikes Act project in conjunction with State wildlife agencies.

SUMMARY OF WILDLIFE AND FISH HABITAT IMPROVEMENTS BY
FOREST IN THE STATE OF CALIFORNIA DURING F.Y. 1979

TOIYABE	Units
1. Threatened and Endangered Plants and Animals	
Forest T&E Species Plan	1 Plan
Specific Site Survey; Lahontan Trout Survey	2 Surveys
2. Wildlife and Fish Habitat Improvement	
PM:	
Thinning for Wildlife Barber Peak*, Walker Rosa*	250 Acres
Wildlife and Fish habitat maintained and/or improved through coordination with Timber	1,800 Acres
3. Surveys, Studies, and Plans	
See No. 1, T&E Species	

SUMMARY OF WILDLIFE AND FISH HABITAT IMPROVEMENTS BY FORESTS IN THE STATE OF IDAHO DURING F.Y. 1979

BOISE	Units
1. Threatened and Endangered Plants and Animals	
Wolf Survey*, Bald Eagle Winter Survey*, Peregrine Falcon Survey	3 Surveys
2. Wildlife and Fish Habitat Improvement	
PM:	
Burning, Planting; Mountain Home, Boise*, Emmett* Ranger Districts	5,655 Acres
Stream Improvement Structures; Rattlesnake, Johnson, Clear, Canyon E. Fk Swanholm Creeks	42 Structures
Guzzlers; Boise Ranger District*	4 Structures
Wildlife and Fish Habitat maintained and/or improved through coordination with Timber, Range, and Land Use Planning	34,171 Acres
K-V:	
Stream Improvement Structures; East Fork Swanholm Creek	50 Structures
Seeding; Boise Ranger District	300 Acres
Water Developments; Boise Ranger District*	10 Developments
Escape Ramps for Birds - Emmett Ranger District	59 Structures
MANPOWER:	
Shrub Planting; Boise*, and Payette* Ranger Districts	175 Acres
Stream Improvement Structures - Rattlesnake, Johnson, Clear, Canyon, and E. Fk Swanholm, Creeks	90 Structures
3. Wildlife and Fish Habitat Maintained	
PM:	
Stream Improvement Structures*	20 Structures
K-V:	
Road Closures*	34 Miles

4. Surveys, Studies, and Plans

Middle Fork Payette Winter Range Improvement Plan, Elk/Timber Coordination Plan	2 Plans
South Fork Payette Fish Survey, Anderson Ranch Reservoir Survey, South Fork Salmon River Survey*	3 Surveys

CARIBOU	Units
1. Threatened and Endangered Plants and Animals	
Forest Threatened and Endangered Species Plan; Utah cutthroat plan for Giraffe Creek	2 Plans
2. Wildlife and Fish Habitat Improvement	
PM:	
Prescribed burning, seeding, browse planting, hedgerow-estab; Curlew Grasslands*, Pebble Creek*, Red Mountain Dry Valley*, Sulpher Front-Soda Spring*, Diamond Creek*, Sulpher Canyon*	2,678 Acres
Water impoundments and improvements for waterfowl at Sweeten Pond* on Swan Lake	80 Acres
Water Developments at Slate Mountain*, Carter Field and Home Canyon	10 Acres
Protection Fencing Dry Valley	3 Acres
Wildlife and Fish habitat maintained and/or improved through coordination with Timber, Range, Watershed, Land Use Planning	60,882 Acres
K-V:	
Forb planting at Tree Cashe, Pole and Nelson Canyons	4.5 Acres
MANPOWER:	
Thinning mahogany, creating openings in aspen, and clearing in pinyon-juniper in Nelson* and S.F. Paris Canyons*, Pebble Creek*, Mink Creek*, and Grasslands*	246 Acres
Seed collection	100 Pounds
Protection Fencing on Diamond Creek	1 Acres
Bird Guzzlers	2 Structures

3. Wildlife and Fish Habitat Maintenance

PM:

Hedgerow - maintenance Curlew Grasslands*	94 Acres

MANPOWER:

Hedgerow maintenance Curlew Grasslands*	72 Acres

4. Surveys, Studies, and Plans

PM:

Fish Habitat Survey on McCoy Creek Phosphate Area Study, Bluebird nesting surveys	3 Surveys
Beaver Management Plan	1 Plan
Sagegrouse monitoring	1 Study

CHALLIS	Units
1. Threatened and Endangered Species	
Peregrine Falcon survey*	1 Survey
2. Wildlife and Fish Habitat Improvement	
PM:	
Shrub planting to improve the winter range on Peach Creek*	40 Acres
Grouse Lake Improvement	1 Development
Fencing to protect guzzlers and development at Grouse Lake*	60 Acres
Water Developments*	2 Each
Wildlife and Fish Habitat maintained and/or improved, etc. Timber, Range	176,566 Acres
MANPOWER:	
Mahogany rejuvination* and willow planting*	154 Acres
Stream structures	63 Structures
3. Wildlife and Fish Habitat Maintenance	
PM:	
Wildlife exclosure maintained	1 Exclosure
Stream Improvement Structures	30 Structures
4. Surveys, Studies, and Plans	
Burn site* inventory, Stream* inventory, Lake* survey, fish planting* plans	4 Plans

PAYETTE	Units
1. Threatened and Endangered Species	
Habitat Management Plan for T&E and sensitive species (plant and animal)	1 Plan
2. Wildlife and Fish Habitat Improvement	
PM:	
Burning, shrub planting for wildlife Weiser, New Meadows*, Krassel* districts	340 Acres
Fencing to protect nesting cover Lost Creek	10 Acres
Wildlife and Fish Habitat maintained and/or improved through coordination with Timber and Range	196,438 Acres
K-V:	
Shrub Planting So. Fork Salmon River	8 Acres
3. Wildlife and Fish Habitat Maintenance	
Road closures	5 miles
Signing trees, shrub planting for wildlife Krassel District	200 Trees
4. Surveys, Studies, and Plans	
Forest Aquatic Habitat Action Plan	1 Plan

SALMON	Units
1. Wildlife and Fish Habitat Improvement	
PM:	
Burning, pruning for wildlife, willow planting Colbalt, Leadore Districts	510 Acres
Debris removal for fish Spring Camas and Iron Creeks	83 Acres
Large Boulders placed to improve fish habitat Panther Creek, Leadore* District	64 Units
Wildlife and Fish Habitat maintained and/or improved through coordination with Timber and Range	26,430 Acres
MANPOWER:	
Stream structures to improve fish habitat Leadore* District	20 Structures
Nesting boxes for ducks Williams* Lake	14 Boxes
2. Wildlife and Fisheries Habitat Maintenance	
Stream* Improvement Structures maintained	5 Structures
3. Survey, Studies, and Plans	
Haynes Creek Lake feasibility	1 Study

SAWTOOTH	Units
1. Threatened and Endangered Species	
Forest Plant and Animal T&E Plan	1 Plan
2. Wildlife and Fish Habitat Improvement	
PM:	
Burning, browse planting Boulder Slope*, Black Pine*	950 Acres
Irrigation fish* screens	5 Screens
Fish* ladder	1 Ladder
Stream Structures for fish	30 Structures
Wildlife and Fish Habitat maintained and/or improved through coordination with Timber and Range	489,247 Acres
K-V:	
Planting Disturbed areas; Paradise, Miller Creek, Abbott Log Chute, Warboise timber sales	257 Acres
MANPOWER:	
Guzzlers for birds; Formation*, Bally Mountain	10 Guzzlers
Browse planting for wildlife Black Pine Mountains	90 Acres
3. Wildlife and Fish Habitat Maintenance	
MANPOWER:	
Elk exclosures S. Fk Boise River*	2 Exclosures
Signing of trees for wildlife	100 Trees
Removal of stream* barriers	2 Miles

4. Surveys, Studies, and Plans

Cassis* wildlife, Sage Grouse*, Bald Eagle* surveys, Baker* Creek, Coop Elk Study, Upland Game Habitat, Stream Habitat survey, Instream flow* study, Taylor Mountain Riparian Habitat Survey, Burn Survey, Wood River, Big Boulder Creek passage survey, Burning Plan for Cooper and Elkloon Creeks, Warm Springs Creek Passage Survey — 14 Plans

TARGHEE	Units
1. Threatened and Endangered Plants and Animals	
Burning for Grizzly Bear	200 Acres
2. Wildlife and Fish Habitat Improvement	
PM:	
Burning*, clearcutting, planting for wildlife	988 Acres
Water Development, marsh* rejuvination, channel clearing	58 Acres
Snow fencing and stream protection fencing	15 Acres
Wildlife and Fish habitat maintained and/or improved through coordination with Timber, Range, Land Use Planning	130,453 Acres
3. Surveys, Plans, and Studies	
Idaho/Wyoming	
Forest Wildlife and Fish Plan, Old Growth management guidelines, snag management guidelines, raptor management plan, Big Game management guidelines	6 Plans
Idaho	
Aquatic Habitat* Survey, Instream flow survey, Big Hole	2 Plans

SUMMARY OF WILDLIFE AND FISH HABITAT IMPROVEMENTS BY FORESTS IN THE STATE OF NEVADA DURING F.Y. 1979

HUMBOLDT	Units
1. Threatened and Endangered Plants and Animals	
Forest Plant and Animal T&E Plan	1 Plan
2. Wildlife and Fish Habitat Improvement	
PM:	
Burning, chaining, seeding, rehabilitation; Jarbidge*, Ruby Mountain, Santa Rosa*, Mountain City, Schell Range, S. Ruby Mountain	9,156 Acres
Water Developments*	19 Structures
Escape Ramps	30 Structures
Stream Channel cleaning	0.5 Mile
Fencing for wildlife	9 Acres
Wildlife and Fish Habitat maintained and/or improved through coordination with Range, Land Use Planning	687,511 Acres
3. Wildlife and Fish Habitat Maintenance	
PM:	
Wildlife exclosures	15 Exclosures
4. Surveys, Studies, and Plans	
Beaver Management plan, Non-Game Habitat Management Guidelines	2 Plans
Aquatic Habitat Survey, Bighorn Habital Survey	3 Surveys

TOIYABE	Units
1. Threatened and Endangered Plants and Animals	
Forest Plant and Animal T&E Plan	1 Plan
Site Surveys for T&E species	14 Surveys
2. Wildlife and Fish Habitat Improvement	
PM:	
Burning, seeding, thinning for wildlife; Burnt* Cabin, Hunts* Canyon, Togrima* Walker* Rosa	1,419 Acres
Water Developments Manther*, Saw Mill*, Scout Canyon*	3 Developments
Fencing Water Developments*	3 Acres
Wildlife and Fish Habitat maintained and/or improved through coordination with Timber, Range	66,835 Acres
MANPOWER:	
Thinning and seeding; Togrima* Pravina*	46 Acres
Water Development; Manther	2 Developments
Protective Fencing	12 Miles
Brushpile coverts for wildlife Willow Creek*	47 Coverts
3. Surveys, Studies, and Plans	
Forest Plant and Animal T&E Plan	1 Plan
Site Surveys for T&E species	14 Surveys

SUMMARY OF WILDLIFE AND FISH HABITAT IMPROVEMENTS BY FORESTS IN THE STATE OF UTAH DURING F.Y. 1979

ASHLEY	Units
1. Threatened and Endangered Plants and Animals	
Forest T&E Species Plan	1 Plan
Phosphate Area T&E	1 Plan
2. Wildlife and Fish Habitat Improvement	
PM:	
Burning, shrub planting; Red Pine, Gorge Spring, East Bear Mountain, Mustang Ridge, Mud Spring Draw, Pine Hollow	333 Acres
Stream Improvements; Sheep Creek* N. F. Ashley Creek	21 Structures
Water Developments, Guzzlers Bear* Mountain, Antelope* Canyon, Death Valley Cow Canyon, McKueen	8 Developments
Exclosures Cart Creek, Anthro	5 Exclosures
Wildlife and Fish Habital improved and/or maintained through coordination with Timber, Range	129,510 Acres
K-V:	
Water Development Dowd Mountain	1 Development
MANPOWER:	
Exclosures Cart Creek, Anthro	3 Developments
3. Wildlife and Fish Habitat Maintained	
PM:	
Stream Improvement Structures Sheep Creek	3 Structures

MANPOWER:

Exclosures for wildlife Lake Mountain	3 Acres

4. Surveys, Studies, and Plans

Uinta River Riparian Habital Survey, Cart Creek and Deep Creek Aquatic Surveys, Uinta River Aquatic and terrestrial Survey	4 Surveys
Snag Management Plan, Habital Improvement Plans, Trout Creek, Red Pine, Vernal District*, Bear Mountain*	5 Plans

DIXIE	Units
1. Threatened and Endangered Plants and Animals	
Prairie Dog Survey, Peregrine Falcon Survey, Winter Eagle Survey	3 Surveys
2. Wildlife and Fish Habitat Improvement	
PM:	
Chaining and seeding for wildlife, Twin Springs	500 Acres
Water Developments*; Mud Spring Big Bench, Little Grassy, Willow Spring, Maple Spring, John Cameron Spring, Sawmill Spring, Cons Hole Pipeline, Lost Spring Pond, Cameron Wash, Upper Valley East and West	25 Developments
Aspen treatment, planting and seeding, Griffen* Boulder, Pollywog Lake*	189 Acres
Wildlife Exclosure Tebbs Spring, Boulder	2 Exclosures
Bank Stabilization E. Fork Sevier*	10 Acres
Brushpiles N. Creek* Boulder Top	39 Piles
Wildlife and Fish Habitat maintained and/or improved through coordination with Timber, Range, and Land Use Planning	42,264 Acres
3. Wildlife and Fish Habitat Maintained	
K-V:	
Snag Marking Cedar Mountain, E. Fork	8,000 Acres
4. Surveys, Studies, and Plans	
Antelope Habitat Survey, Elk* Habital Survey, Snag Surveys	5 Surveys

FISHLAKE	Units
1. Threatened and Endangered Plants and Animals	
Forest Plant and Animal T&E Plan	1 Plan
Peregrine Falcon Habital Survey	1 Survey
2. Wildlife and Fish Habitat Improvement	
PM:	
Chaining for elk and deer Cedar Mountain*	655 Acres
Exclosures for wildlife Lyman, Grindstone Flat, Black Mountain	3 Exclosures
Improvements on Beaver* Ponds	2 Improvements
Stream Improvement Structures Birch* Creek	20 Structures
Wildlife and Fish Habital maintained and/or improved through coordination with Fire and Watershed	260,135 Acres
K-V:	
Pruning, seeding; U. M. Pass, Convulsion Rim	75 Acres
Spring Development Lake* Creek	1 Structure
MANPOWER:	
Thinning and seeding S. H. Ridge, Lost Creek	425 Acres
3. Surveys, Studies, and Plans	
Seven Mile Creek Survey, Elk Winter Habital Use Survey, Riparian Survey, Burn Survey	4 Surveys

MANTI-LASAL	Units
1. Threatened and Endangered Plant and Animals	
Forest Plant and Animal T&E Plan	1 Plan
2. Wildlife and Fish Habitat Improvement	
PM:	
Cutting, burning, pruning, clearing, release, seeding and planting; Horn * Mountain, Slaughter* Flat, Jack* Spring, North* Creek, Huntington* Creek, Dry* Mesa Elk Ridge*	3,205 Acres
Stream Improvement Structures	1 Structure
Water Development	37 Developments
Protection fencing Julius Pasture	2 Acres
Nestboxes Duck Fork* Lake	1 Nestbox
Brush Piles Dry Mesa	204 Piles
Wildlife and Fish Habital maintained and/or improved through coordination with Timber, Range, and Land Use Planning	13,900 Acres
K-V:	
Spraying to control* sagebrush	3 Acres
Streamside seeding and planting Huntington* Creek	15 Acres
MANPOWER:	
Spraying to control sagebrush	5 Acres
Streamside seeding and planting	10 Acres
Nestboxes Duck* Fork Lake	6 Boxes
Stream Improvement Structures	1 Structure

3. Wildlife and Fish Habitat Maintenance

MANPOWER:

Wildlife Exclosures maintained	3 Exclosures
Water Developments	5 Developments

4. Surveys, Studies, and Plans

District Wildlife Plan, Joe's Valley Mitigation Plan	2 Plans

UINTA	Units
1. Threatened and Endangered Plants and Animals	
Forest Plant and Animal T&E Plan	1 Plan
Forest T&E Plant Survey, Peregrine Eyries Surveys	2 Surveys
2. Wildlife and Fish Habital Improvement	
PM:	
Burn, cut, prune; Main Canyon*, Hogsback* Ridge, Iron* Mine Creek, Strawberry* Peak, Mt. Timpanogas*, Onaqui* West Well, Ironton*, Wasatch*, Nebo* Face, Spanish Fork	874 Acres
Guzzler construction; Ironton*	1 Guzzler
Stream structures; Daniels Canyon, N. Fk* American Fork, Vernon Creek	37 Structures
Bird Box construction American Fork	20 Boxes
Shoreline Protection, Barrier Removal, Mill Hollow, Harry's Reservoir	1.5 Miles
Fence Removal Payson and Andrews* Ridge	5.25 Miles
Cleanout of Debris Basin Granite* Flat	3 Acres
Wildlife and Fish Habital maintained and/or improved through coordination with Timber, Range, and Land Use Planning	954,032 Acres
MANPOWER:	
Blowdown Barrier Removal Mill Hollow	1.4 Acres
3. Wildlife and Fish Habital Maintenance	
PM:	
Exclosures, Guzzlers, Escape Ramps Tank Hollow, Red Creek, Wasatch Front	16 Structures

4. Surveys, Studies, and Plans

Bonneville Unit (CUP) Mitigation Plan, Animal Damage Control Plans, Deer and Elk Herd Unit Plans, Diamond Fork Raptor Management Plan	7 Plans

WASATCH	Units
1. Wildlife and Fish Habital Improvement	
PM:	
Regeneration, burning, seeding, planting; Logan*, Red* Butte, Mt. Dell*, Kamas*, Lilly Lake, Logan Canyon, Monte* Cristo, E. Fork Smith Fork, Bear River*, Snow Basin	294 Acres
Water Developments, Lake Improvements; Logan, Little Manti, Marsh Lake, Kamas	39 Developments
Channel Stablization; Broadhead Meadows	1 Acre
Barrier Removal Broadhead Meadows	15 Barriers
Wildlife and Fish Habital maintained and/or improved by coordination with Timber, Range, and Land Use Planning	55,930 Acres
K-V:	
Fencing Sage Creek Park	200 Acres
Seeding Green Fork T.S.	5 Acres
MANPOWER:	
Planting Shrubs Red Butte*, Mt. Dell*	200 Acres
2. Surveys, Studies, and Plans	
Utah and Wyoming	
East Fork Smith Fork Stream Survey	1 Survey
Utah	
Beaver Habitat Surveys, Wildlife Habital type Relationships	3 Surveys
Skull Valley Winter Range Plan, Willow Burn Plan	2 Plans

SUMMARY OF WILDLIFE AND FISH HABITAT IMPROVEMENTS BY
FORESTS IN THE STATE OF WYOMING DURING F.Y. 1979

BRIDGER-TETON	Units
1. Threatened and Endangered Plants and Animals	
Colorado and Utah* Cutthroat Survey Peregrine Falcon* Eyrie Survey Grizzly Bear* Habital Survey Bald Eagle/Ospray Nest Survey No. Rocky Mountain Wolf Survey	5 Surveys
2. Wildlife and Fish Habital Improvement	
PM:	
Burning, pruning, seeding; Dry* Dallis, Roaring Elk, Fontenelle* Grays River	810 Acres
Water Developments Fontenelle	2 Developments
Fish Control Waterdog	10 Acres
Wildlife and Fish Habital maintained and/or improved through coordination with Timber, Range, and Land Use Planning	687,156 Acres
K-V:	
Reseeding; Maki Creek	6 Acres
3. Wildlife and Fish Habital Maintenance	
PM:	
Fence Maintenance; Kendall Springs, Hoback River	7 Acres
4. Surveys, Studies, and Plans	
Elk/Logging Plan Comprehensive 5-Year Plan	2 Plans

TARGHEE	Units
1. Wildlife and Fish Habital Improvement	
PM:	
Burning* and Pruning for wildlife	105 Acres
Wildlife and Fish Habital maintained and/or improved through coordination with Land Use Planning	20,000 Acres
2. Surveys, Studies, and Plans	
Idaho/Wyoming	
Forest Wildlife and Fish Plan, Old growth management guidelines, snag management guidelines, raptor management plan, Big Game management guidelines	6 Plans

WASATCH - Wyoming	Units
1. Wildlife and Fish Habital Improvement	
PM:	
Fencing Sage Creek Park	100 Acres
Wildlife and Fish Habital maintained and/or improved through coordination with Range, Oil Drilling Sites	12,000 Acres
2. Surveys, Studies, and Plans	
East Fork Smiths Fork Stream Survey	1 Survey